

MWI 5100.3

BASELINE

EFFECTIVE DATE: November 5, 2002

EXPIRATION DATE: November 5, 2007

MARSHALL WORK INSTRUCTION

ED01

Outsource Processing for Fabrication/Integration Services

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DOCUMENT HISTORY LOG

Status (Baseline/ Revision/ Canceled)	Document Revision	Effective Date	Description
Baseline		11/5/02	

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1. PURPOSE

This Marshall Work Instruction (MWI) describes the process to procure fabrication/integration services for flight hardware, ground support/special test equipment, and development/laboratory support articles and materials through the Marshall Space Flight Center's (MSFC) Outsourcing Process Team (OPT). The outsourcing process supports the small business initiatives set forth by the Small Business Office within the MSFC Procurement Office.

2. APPLICABILITY

This MWI applies to all MSFC procurement "Buy" decisions made through the process associated with MWI 1280.1, "Fabrication Services Request Instructions (MSFC Form 3751)." This process is applicable for products and services not within the scope of procured items associated with MWI 4530.1.

Procurement processing under this instruction is limited to ≤ \$100,000 unless otherwise authorized by the Procurement Office.

Work to be performed under this process will be within the broad parameters set forth by the specifications associated with Request for Quotes (RFQ) and purchase orders issued and executed by the OPT contracting officer (CO).

3. APPLICABLE DOCUMENTS

- 3.1 Federal Acquisition Regulation (FAR)
- 3.2 MPG 1410.2, "Marshall Management Directive System"
- 3.3 MPG 2190.1, "MSFC Export Control"
- 3.4 MPG 5000.1, "Purchasing"
- 3.5 MPG 6410.1, "Handling, Storage, Packaging, Preservation, and Delivery (HSPP&D)"
- 3.6 MPG 8060.1, "Flight Systems Design/Development Control"
- 3.7 MPG 8060.2, "Non-Flight And Non-Facility Design Development"
- 3.8 MPG 8730.1, "Inspection and Testing"
- 3.9 MWI 1280.1, "Fabrication Services Request Instructions (MSFC Form 3751)"

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3.10 MWI 4530.1, "Flight Hardware Support Operations (FHSO) Component Acquisition, Inventory control, and Kitting Services"

3.11 MWI 5100.1, "Procurement Initiators Guide"

3.12 MWI 5100.2, "Automated Procurement Request System (APRS) Process"

3.13 MWI 5330.1, "Evaluation of Contractors, Suppliers, and Vendors"

3.14 MWI 6410.1, "Packaging, Handling, and Moving Program Critical Hardware"

3.15 MWI 7120.1, "Program/Project Quality Plan"

3.16 MWI 8040.3, "Deviation and Waiver Process MSFC Programs/Projects"

3.17 MWI 8040.4, "Application Guidance for Traceability"

3.18 MWI 8040.5, "Floor Engineering Orders and Floor Engineering Parts Lists (FEO/FEPLs)"

4. REFERENCES

4.1 Audited Vendor List (AVL) Link:
<https://msfcsma3.msfc.nasa.gov/dbwebs/apps/avl/default.asp>

4.2 Limited Vendor List (LVL) Link:
<https://msfcsma3.msfc.nasa.gov/dbwebs/apps/lvl/default.asp>

4.3 Project Specific Approved Supplier List (PSASL) Link:
https://msfcsma3.msfc.nasa.gov/dbwebs/apps/lvl/default_psasl.asp

5. DEFINITIONS

5.1 APRS (Automated Procurement Request System). An on-line Centerwide automated procurement request system for the initiation, routing, approval, and tracking of procurement requests.

5.2 Contractor. Refers to the manufacturing off-site support contractor.

5.3 Contracting Officer (CO). A person, appointed in accordance

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with the FAR, with the sole authority to enter into, administer, and/or terminate Government contracts and make related determinations and findings.

5.4 Customer. Recipient of a product or service provided by the supplier. The requester or contact person on the MSFC Form 3751, "Fabrication Request," who is requesting work or services from the Manufacturing Services Group.

5.5 Organization. Generic term used to describe a Marshall Program/Project office, Directorate, Department, or Group.

5.6 Outsourcing Process Team (OPT). The OPT consists of co-located procurement, manufacturing, and quality assurance personnel responsible for developing the procurement package, the RFQ, evaluation, award, and administration of the purchase order.

5.7 Requester. The person initiating the MSFC Form 3751 requesting fabrication services.

6. INSTRUCTIONS

6.1 Request for Outsourcing.

Request for manufacturing services shall be made using the applicable forms in MWI 1280.1 through the Manufacturing Services Group to have hardware articles or materials manufactured and/or serviced. The Manufacturing Services Group will work with the requestor to determine a "make" or "buy" decision. If the decision is to "buy," the designated manufacturing services representative will forward the request and associated documentation to the OPT to begin the procurement process.

6.1.1 Structure and responsibilities for the OPT.

6.1.1.1 The OPT manufacturing representative will be the single point of contact.

6.1.1.2 The OPT procurement representative shall initiate the procurement RFQ and process the subsequent contract documentation.

6.1.1.3 The OPT quality representative shall be responsible for the request package quality requirement review and supplier evaluation.

6.1.1.4 The OPT shall coordinate with the requestor on

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procurement status, engineering changes, requirement changes, and/or deviation/waiver processing.

6.1.1.5 The OPT shall utilize suppliers based on their qualification noted on the various supplier listings within MWI 5330.1.

6.1.1.6 The OPT manufacturing and quality assurance representatives shall perform audits of these contractors within the scope of the above noted MWI as part of the overall outsourcing process.

6.1.1.7 The OPT manufacturing representative and the quality representative will review the request package and begin the procurement process to the requirements of MWI 5100.2 when the required documentation is received.

6.1.2 Requestor responsibilities.

6.1.2.1 The requestor shall provide the documentation, as applicable, listed in Appendix A to support the outsourcing process.

6.1.2.2 The requestor shall ensure there are "sufficient project funds" available for the procurement. The funds shall be transferred into the Manufacturing Services Group carrier account. The requestor must consider and allow adequate time for funding approval, procurement processing, and receiving when determining desired delivery dates.

6.2 Review and Request for Proposal.

6.2.1 The OPT manufacturing and quality representative shall perform a technical review of the documentation to begin the procurement process. Any discrepancies will be related back to the requestor via Email for resolution prior to the procurement RFQ being released.

6.2.2 The OPT team shall select three qualified suppliers on a rotating basis listed on the Audited Vendor List (AVL), Limited Vendor List (LVL), and Project Specific Approved Supplier List (PSASL) (Reference MWI 5330.1). If three suppliers are not available on the lists, the OPT will utilize the available suppliers and a RDSS (Recommendation & Determination to Solicit One Source) will not be required. A justification must be presented to the OPT contracting officer for limiting the competition to less than three suppliers when they are available.

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6.2.3 The OPT manufacturing representative shall initiate a procurement request (Reference MWI 5100.2) to include or add as an attachment the applicable information in Appendix B.

6.2.4 The OPT procurement representative shall initiate a purchase order file for the procurement package as specified in Appendix C. No verbal contract agreements will be performed at any time within the outsourcing process.

6.2.5 The requestor shall be responsible for identifying and providing Government Furnished Equipment (GFE) for shipment to the supplier. The OPT manufacturing representative shall be responsible for processing the documentation to ship the GFE (Reference MPG 6410.1).

6.2.6 The requestor's supporting quality engineer shall be responsible for all quality inspection requirements to be performed by the "Safety Mission Assurance Office" or their delegated agent. End item delivery points, program critical hardware requirements, and associated documentation will be specified and supplied by the requestor.

6.2.7 Based upon the request the OPT manufacturing representative will specify point of acceptance and related acceptance documentation.

6.2.8 Any processing allowing red-lines (Reference MPG 8060.2) and/or waiver, will require a purchase order modification after a limit of 5 redline changes, 5 attributes per redline, or any redline that will change the deliverable product/service or price of the purchase order. This requirement will be included in the RFQ documentation as applicable.

6.2.9 When the procurement package has been approved and funding is available, the OPT Contracting Officer will generate a RFQ MSFC-FORM-55a (Reference MWI 5100.1). A copy of the purchase order will be submitted to the directorate and/or subcontractor responsible for performing the product receiving/receiving inspection process at the Center. Only the OPT Contracting Officer may use a credit card to perform the procurement process.

6.2.10 The OPT manufacturing representative will be the single point of contact for any discrepancies noted during the procurement process. The OPT manufacturing representative will work with the requester, the OPT quality representative and/or requesters quality representative to correct any problems

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associated with the RFQ process. Problem resolution/change request via Email or hard copy will be maintained in the specific contract files. Any formal changes to the RFQ shall be submitted and approved by the OPT Contracting Officer. The OPT manufacturing representative will track the procurement status.

6.3 RFQ Return Review and Contract Award. When a RFQ response is received, the OPT Contracting Officer will maintain the original package and submit a copy to the OPT for technical evaluation. The OPT Contracting Officer will then make award to the low price technically acceptable vendor utilizing a MSFC-FORM-55 (Reference MWI 5100.1).

6.4 Contract Change Control. Purchase Order modifications may be initiated either from the requestor or supplier using the Outsourcing Contract Change Request (OCCR) form shown in Appendix D. The executed OCCR shall serve as the negotiated agreement between the supplier and the Government when approved by the Contracting Officer. A separate purchase order modification will incorporate the agreed upon changes.

Any engineering changes initiated by a Floor Engineering Order (FEO) or Floor Engineering Parts List (FEPL) shall be released by the MSFC configuration control board prior to final acceptance by MSFC. If the FEO/FEPL have not been released, the product shall be contractually accepted and held in MSFC receiving inspection until the requestor has provided copies of the released engineering documentation to the OPT as required by MWI 8040.5.

6.5 Product Acceptance/Purchase Order Closure. The OPT manufacturing representative will monitor the suppliers performance. The status will be updated as necessary. If the product has not been delivered on time, the OPT manufacturing representative will contact the supplier to ascertain the status of the delivery and any issues delaying delivery. When delivery is made, the OPT manufacturing representative will provide the Contracting Officer with evidence of the acceptance of the product and/or service. The OPT quality representative will monitor receiving inspection nonconformances based upon the requirements of MWI 5330.1. Information related to contract nonconformances will be maintained in the contract file.

7. NOTES

A Letter of Record of contracts issued, by company name, will be submitted to the MSFC Small Business Assistance Office semi-annually.

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The customer needs to insure that allowances are made in their schedule for NASA quality assurance to do their inspections once finished parts are returned to MSFC. This could take upwards of a week or longer depending upon the inspection and test requirements to be performed during the receiving process.

Depending on the complexity of the purchasing documentation requirements, a Statement Of Work (SOW), in an electronic format, may be required by the OPT Contracting Officer.

The requestor will identify any applicable export control requirements that are associated with the procurement request (Reference MPG 2190.1).

8. SAFETY PRECAUTIONS AND WARNING NOTES

None

9. RECORDS

9.1 OPT Contract file (Appendix C), maintained for 5 years by the Outsourcing Process Team Office. After 5 years these records can be destroyed.

9.2 Procurement specific documentation as specified in MPG 5000.1 will be maintained and dispositioned by the Procurement Office.

10. PERSONNEL TRAINING AND CERTIFICATION

10.1 Manufacturing personnel shall be trained as specified by the Manufacturing Services Group.

10.2 Quality Assurance personnel shall be qualified as specified in MWI 5330.1, lead auditor.

11. FLOW DIAGRAM

None

12. CANCELLATION

None

Original signed by
Axel Roth for

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A. G. Stephenson
Director

Appendix A

Outsourcing Documentation Requirements

The following documentation should be submitted via a Microsoft Word document to the maximum extent practicable to facilitate incorporation into procurement documentation.

A.1 Fabrication Request MSFC Form 3751.

This form is to be completed in its entirety ensuring all blocks are completed and the requester name, phone number and a valid funding code are provided.

A.2 Five sets of drawings.

5 sets of drawings, including all applicable Engineering Orders (EO), and Engineering Parts List (EPL) shall be provided. (Reference MPG 8060.1 and MPG 8060.2). The drawings are for as follows: One for each of the three solicited vendors, one for the OPT file, and one for the "selected" supplier to be included in the data package for receiving inspection. Preliminary drawings will only be accepted for engineering unit and/or developmental product/service procurements.

A.3 Sole Source.

Information for justifying SOLE SOURCE procurements shall be provided to the OPT. (Recommendation and determination to solicit from one source Per FAR 13.106-1(b)(1)).

A.4 Emergency.

Emergency justification requirements will need to be submitted describing why the parts are needed on an emergency basis.

A.5 Government Furnished Equipment/Materials (GFE/M).

A list of GFE/M to be shipped as part of the products to be manufactured and/or serviced shall be included. The list should be detailed as to Find Numbers (F/N's) associated with assembly drawings and or articles/materials to be serviced. Shipping by MSFC to the supplier, hand carry delivery by MSFC, or supplier pickup must be specified.

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A.6 Point of Delivery.

End item delivery point i.e., requester, Bldg 4723/4705 storeroom, etc.

A.7 Quality Requirements.

A project/program quality engineer point of contact shall be provided by the requestor so as to provide to the OPT the following:

A.7.1 A copy of the released/approved MSFC program/project quality plan.

A.7.2 Applicable quality requirements including GFE shipping inspection, in process source inspection (NASA or Government delegated with related letters or forms), receiving inspection, and acceptance test requirements (Reference MWI 7120.1, MPG 8730.1). Non-quality-sensitive requirements will require as a minimum acceptance requirements by the user.

A.8 -900 Configuration.

A -900 is a designation used to describe an "excess" or "less than" what is to be required of a product or service associated with an engineering drawing and/or specification. (Example: 96M12345-1(-)-900, less notes 3 & 4)

Note: The applicable lower or next higher assembly drawings/specifications are required to be included with the request package as required based on the 900 configuration.

A.9 Waivers/Deviations.

Any and all waivers associated with this procurement process when the requirements of the MSFC quality management system have not been complied with (Reference MPG 1410.2).

A.10 Certificates of Compliance (COC).

Type of COC as specified in MWI 8040.4 will be required.

A.11 Special Requirements.

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A.11.1 If testing and test results are required a released/approved copy of the test procedure(s) is required for each test.

A.11.2 Any other Acceptance Data Package (ADP) data requirements to be submitted by the supplier not specified above such as the detailed inspection and test records, MSFC shipping documentation, personnel certification records, material certifications, shelf-life certification, nonconformance documentation, approved deviation/waivers, COC's back to the manufacturer, etc.

A.11.3 Government Furnished Equipment/Material (GFE/M) packaging and inspection requirements.

A.11.4 Any Program Critical Hardware handling and documentation requirements (Reference MWI 6410.1).

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Appendix B

Outsourcing Procurement Documentation

- B.1 Listing of all GFE including shipping inspection requirements including shipping forms to be used i.e., DD-1149, MSFC-FORM-57, or other applicable form.
- B.2 Delegated NASA and/or Government inspection requirements, including applicable forms and/or letters.
- B.3 Delivery Points, Building 4471, 4723, or requestor.
- B.4 Describe whether the product or service is considered Flight or Non-Flight.
- B.5 Any required Program Critical Hardware requirements.
- B.6 Subcontractor Certificate of Compliance (COC) requirements.
- B.7 Point of acceptance.
- B.8 Acceptance documentation, DD-250 (Contractor initiated), dray ticket MSFC-FORM-113 (MSFC initiated).
- B.9 Acceptance Data Package (ADP) requirements.
- B.10 Deviation and waiver processing for nonconforming product/servicing and/or engineering change request.
- B.11 GFE/M Inspection/Certification documentation requirements.
- B.12 Red-line processing requirements as applicable.

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Appendix C

OPT Contract File

- C.1 One set of applicable drawings and/or specifications.
- C.2 Request for Quote (RFQ) for each selected vendor.
- C.3 Awarded instrument with all modifications.
- C.4 End Item acceptance/delivery documentation as applicable.

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Appendix D
Supplier/NASA Outsourcing Contract Change Request (OCCR)

1. Supplier/MSFC	2. Contract/DCN:	3. Drawing Number(s):	4. Page __ of __	
5. Reason for OCCR <input type="checkbox"/> Facilitate Manufacturing <input type="checkbox"/> Other (Specify) <input type="checkbox"/> Design Change				
6. AS SPECIFIED		7. CHANGE REQUESTED		
8. Impact on Price and Schedule: <input type="checkbox"/> No Price Adjustment Delivery Date Change: No <input type="checkbox"/> Yes <input type="checkbox"/> _____ <input type="checkbox"/> Price Adjustment (Increase/Decrease) _____ Manhours\$ _____ Material\$ _____				
9. Signature of Authorized Contractor Representative:				Date:
10. Organization	Representative:	Approval	Disapproval	Date:
11. OPT Technical Representative: <input type="checkbox"/> Approval <input type="checkbox"/> Disapproval		12. Contracting Officer: <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved <input type="checkbox"/> Approval Subject To:		
Signature:	Date:	Signature:	Date:	
Outsourcing Contract Change Request			13. OCCR Number:	

MSFC-FORM-3748

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OCCR Instructions

1. Supplier Name or "MSFC."
2. Contract/Purchase Order Number/Document Control Number (DCN).
3. Drawing number(s) including as applicable, engineering parts list and Engineering Orders.
4. Pages applicable to include any attachments.
5. Document the reason for submittal, for "other" give general description.
6. State the present required engineering/quantity requirements.
7. The requested change.
8. Supplier price adjustment impacts circle "Increase" or "Decrease" as applicable.
9. Signature of authorized contractor representative.
10. Signature of the MSFC requestor and/or the design representative. Any time there is a cost impact a signature by the OPT Resource Representative will be required.
11. Outsourcing process team technical representative signature for approval/disapproval and date.
12. Outsourcing process team Contracting Officer signature for approval/disapproval or approval conditions. Approval conditions shall be documented on an OCCR continuation sheet.
13. OCCR number, a unique number specified by the MSFC Outsourcing team. Each subsequent OCCR will have its own unique number specified. Changes to OCCR's issued shall have dash numbers added to assure traceability.

